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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,498	09/30/2003	Hyun-Ju Lee	CU-3333 VE	6055
26530	7590	09/27/2006	EXAMINER	
LADAS & PARRY LLP 224 SOUTH MICHIGAN AVENUE SUITE 1600 CHICAGO, IL 60604			KARLS, SHAY LYNN	
			ART UNIT	PAPER NUMBER
			1744	

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/675,498

Applicant(s)

LEE ET AL.

Examiner

Shay L. Karls

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>9/13/04; 7/15/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the handle located on the main body as stated in claim 14 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. The examiner believes that applicant meant for claim 14, lines 11-12 to read ---said main body cover being provided with a handle.--- since claim 15 states "said handle of said main body cover". Applicant is asked to clarify.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3, 6, 14 and 15 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-5 of copending Application No. 10/625922 in view of Oh (PGPub 20030167590).

‘922 teaches a filter assembly to be fit within a dust collecting casing. The filter assembly comprises a three filters: a net member, a sponge and a non-woven fabric. The filter assembly comprises an outer frame. Oh teaches a vacuum with a brush (2), a driving motor (400) and a main body (1) for housing the driving motor and a filter mounting (100) (claim 1 and 14). There is a dust suction tube (8) having one end connected to the filter mounting and the other end connected to the brush (figure 3) (claim 1 and 14). There is a cyclone dust collector (10) provided in the dust suction tube (claim 14). There is a filter assembly (300) mounted within the filter mounting and comprising a filter housing (310) and a first filter unit (311)

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locked in the filter housing (claim 14). There is a main body cover (320) coupled to the filter assembly (claim 1 and 14). The main body cover is provided with a handle (330) (claim 14). The filter assembly is capable of locking to the main body (figures 6-7, element 500, 510, 520, 530) (claim 14). The handle of the main body cover has a plurality of hooks (530) which can be locked into corresponding grooves (510, 520) on the main body (figures 6-7) (claim 15). Oh also teaches a filter housing with an engagement loop (330) connected to the main body cover (claim 3). There is a safety lever (530) for preventing the filter assembly from being mounted into the filter mounting when the filter is not fully connected with the filter housing. Unless the cover is closed, the filter assembly will not fit within the filter mounting because the lever will be located rearward of the opening for receiving the lever. Once the cover is closed, the lever will be aligned with the opening and the filter assembly can be mounted within the filter mounting (claim 3). It would have been obvious to use the filter as taught by '922 in the filter assembly as taught by '590 so that debris and dust of various sizes will be captured without having to change or clean the filter as often as one would with a single filter.

This is a provisional obviousness-type double patenting rejection.

Claims 8-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3-5 of copending Application No. 10/625922 in view of Oh (PGPub 20030167590) and further in view of Tingle (USPN 6618898) as evidenced by Salo et al. (USPN 6341404).

922 teaches a filter assembly to be fit within a dust collecting casing. The filter assembly comprises a three filters: a net member, a sponge and a non-woven fabric. The filter assembly comprises an outer frame. Oh teaches a vacuum with a brush (2), a driving motor (400) and a

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main body (1) for housing the driving motor and a filter mounting (100) (claim 8). There is a dust suction tube (8) having one end connected to the filter mounting and the other end connected to the brush (figure 3) (claim 8). There is a cyclone dust collector (10) provided in the dust suction tube (claim 8). There is a filter assembly (300) mounted within the filter mounting and comprising a filter housing (310) and a first filter unit (311) locked in the filter housing. There is a main body cover (320) coupled to the filter assembly (claim 8). The main body cover is provided with a handle (330) (claim 8). The filter assembly is capable of locking to the main body (figures 6-7, element 500, 510, 520, 530) (claim 8). The handle of the main body cover has a plurality of hooks (530) which can be locked into corresponding grooves (510, 520) on the main body (figures 6-7) (claim 9). There is a safety lever (530) for preventing the filter assembly from being mounted into the filter mounting when the filter is not fully connected with the filter housing. Unless the cover is closed, the filter assembly will not fit within the filter mounting because the lever will be located rearward of the opening for receiving the lever. Once the cover is closed, the lever will be aligned with the opening and the filter assembly can be mounted within the filter mounting (claim 10). It would have been obvious to use the filter as taught by '922 in the filter assembly as taught by '590 so that debris and dust of various sizes will be captured without having to change or clean the filter as often as one would with a single filter. With regards to the first, second and third hooks, Oh teaches an engagement loop (part of hinge 321 that is connected to the housing) on the filter housing (claim 13). Additionally, there is a first hook means (part of hinge 321 that is connected to the cover) for engaging the engagement loop (claim 13). Oh fail to teach that the main body cover has a second and third hook means each of which are shaped and configured to engage the filter assembly (claim 8). The references

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also fail to teach a plurality of locking jaws which engage second and third hooks (claim 13).

Tingle teaches a means for connecting two parts. There are hooks (42) on one part and lock jaws (38) on the other element. The hook and lock jaws keep the two elements secured together.

While the engagement means of Tingle are not located on a filter housing or cover it is known in art to use engagement means on a filter housing and a filter cover to keep the parts together as evidenced by Salo. Salo teaches a vacuum cleaner with a main body comprising a filter housing (44) for receiving a filter (F). There is a filter housing cover (58). The cover is secured to the housing by means of bayonet locking means (60). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Oh's filter assembly so that the main body cover latches on to the housing in a secure manner using hooks and lock jaws as taught by Tingle. Using the hooks and lock jaws as taught by Tingle on the filter apparatus of Oh, as evidenced by Salo, would allow the cover to be securely closed and locked into position during use (Salo: col. 5, lines 13-26, Tingle: col. 5, lines 36-38). Using hooks and lock jaws on the housing and cover would also prevent the cover from opening accidentally and spilling the contents when removing the apparatus from the filter mounting.

This is a provisional obviousness-type double patenting rejection.

Claim Objections

Claim 16 is objected to because of the following informalities:

Claim 16, line 2, reads "and at least on" however it should read ---and at least one---.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 14 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Oh (PGPub 20030167590).

With regards to claim 1, Oh teaches a vacuum with a brush (2), a driving motor (400) and a main body (1) for housing the driving motor and a filter mounting (100). There is a dust suction tube (8) having one end connected to the filter mounting and the other end connected to the brush (figure 3). There is a filter assembly (300) mounted within the filter mounting to filter out dust from external air drawn into the main body through the suction tube. There is a main body cover (320) coupled to the filter assembly to facilitate the insertion and removal of the filter assembly from the filter mounting. The filter assembly is capable of locking to the main body (figures 6-7, element 500, 510, 520, 530).

With regards to claim 14, Oh teaches a vacuum with a brush (2), a driving motor (400) and a main body (1) for housing the driving motor and a filter mounting (100). There is a dust suction tube (8) having one end connected to the filter mounting and the other end connected to the brush (figure 3). There is a cyclone dust collector (10) provided in the dust suction tube. There is a filter assembly (300) mounted within the filter mounting and comprising a filter

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housing (310) and a first filter unit (311) locked in the filter housing. There is a main body cover (320) coupled to the filter assembly. The main body cover is provided with a handle (330). The filter assembly is capable of locking to the main body (figures 6-7, element 500, 510, 520, 530).

With regards to claim 15, the handle of the main body cover has a plurality of hooks (530) which can be locked into corresponding grooves (510, 520) on the main body (figures 6-7).

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Oh (USPN 6406505).

With regards to claim 1, Oh teaches a vacuum with a brush (5), a driving motor (not shown; col. 2, lines 30-31) and a main body (1) for housing the driving motor and a filter mounting (1a). There is a dust suction tube (3) having one end connected to the filter mounting and the other end connected to the brush (figure 1). There is a filter assembly (7) mounted within the filter mounting to filter out dust from external air drawn into the main body through the suction tube. There is a main body cover (8) coupled to the filter assembly to facilitate the insertion and removal of the filter assembly from the filter mounting. The filter assembly is capable of locking to the main body (not labeled but shown on figure 1, as the clip located at the front of the main body).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 2-3, 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oh (PGPub 2003/0167590) as applied to claim 1 above, in view of Ohno (USPN 3621640) and further in view of Ataka et al. (USPN 4426211).

Oh teaches all the essential elements of the claimed invention as stated above. Oh also teaches an opening (322) in the filter housing and that the filter assembly (300) mounted within the filter mounting comprises a filter housing (310) and a first filter unit (311) locked in the filter housing (claim 2 and 7). Oh also teaches a filter housing with an engagement loop (330) connected to the main body cover. There is a safety lever (530) for preventing the filter assembly from being mounted into the filter mounting when the filter is not fully connected with the filter housing. Unless the cover is closed, the filter assembly will not fit within the filter mounting because the lever will be located rearward of the opening for receiving the lever. Once

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the cover is closed, the level will be aligned with the opening and the filter assembly can be mounted within the filter mounting (claim 3). Oh teaches all the element of the claimed invention however fails to teach using a second filter unit between the filter housing and the first filter (claim 2) wherein the second filter unit comprises a second filter, a second filter holder and a filter net enclosing the second filter within the second filter holder (claim 6). Ohno teaches a filter unit comprising a filter holder (14) and a filter (13) with a filter net (16) used to enclose the filter within the filter holder. Ataka teaches a filter assembly with two filter units (8, 9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Oh's filter assembly so that a second filter unit, such as the one taught by Ohno, can be used as evidenced by Ataka. Using two filters allows for various sized debris and dust to be captured and ensures that the dust passing through the vacuum will be captured by one of the filters (abstract of Ataka). Additionally, using a filter, similar to the one as taught by Ohno, with mesh covering will help to keep the dust within the confines of the filter holder rather than floating within the filter mounting.

Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oh (PGPub 2003/0167590) in view of Ohno (USPN 3621640) and Ataka et al. (USPN 4426211) as applied to claims 2 and 3 above, further in view of Kitamura et al. (PGPub 2003/0028994).

Oh, Ohno and Ataka teach all the essential elements of the claimed invention as stated above however fail to teach that the filter housing further comprises an opening cover for the selectively opening and closing the opening. Kitamura teaches a vacuum cleaner with a cover (38) for selectively opening and closing an opening (34). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the filter housing of Oh so

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that it comprises an opening cover as taught by Kitamura so that the opening can be selectively opened or closed depending on the use of the housing (paragraph 0030). When removing the housing from the filter mounting the opening cover should cover the opening to prevent dust from being released from the housing and when the housing is in position in the filter mounting the opening cover should be open to allow dust to pass through to the filter.

Claims 8-10, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oh (PGPub 2003/0167590) in view of Ohno (USPN 3621640) and Ataka et al. (USPN 4426211) and further in view of Tingle (USPN 6618898) as evidenced by Salo et al. (USPN 6341404).

Oh in view of Ohno and Ataka teach all the essential elements of the claimed invention as stated in the rejection to claims 1-3 and 6-7 above. Oh teaches an engagement loop (part of hinge 321 that is connected to the housing) on the filter housing. Additionally, there is a first hook means (part of hinge 321 that is connected to the cover) for engaging the engagement loop. The references fail to teach that the main body cover has a second and third hook means each of which are shaped and configured to engage the filter assembly (claim 8). The references also fail to teach a plurality of locking jaws which engage second and third hooks (claim 13). Tingle teaches a means for connecting two parts. There are hooks (42) on one part and lock jaws (38) on the other part. The hook and lock jaws keep the two elements secured together. While the engagement means of Tingle are not located on a filter housing or cover it is known in art to use engagement means on a filter housing and a filter cover to keep the parts together as evidenced by Salo. Salo teaches a vacuum cleaner with a main body comprising a filter housing (44) for receiving a filter (F). There is a filter housing cover (58). The cover is secured to the housing by means of bayonet locking means (60). It would have been obvious to one of ordinary skill in the

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art at the time the invention was made to modify Oh's filter assembly so that the main body cover latches on to the housing in a secure manner using hooks and lock jaws as taught by Tingle. Using the hooks and lock jaws as taught by Tingle on the filter apparatus of Oh, as evidenced by Salo, would allow the cover to be securely closed and locked into position during use (Salo: col. 5, lines 13-26, Tingle: col. 5, lines 36-38). Using hooks and lock jaws on the housing and cover would also prevent the cover from opening accidentally and spilling the contents when removing the apparatus from the filter mounting.

Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oh (PGPub 2003/0167590) in view of Ohno (USPN 3621640), Ataka et al. (USPN 4426211), Tingle (USPN 6618898) (as evidenced by Salo et al. (USPN 6341404)) as applied to claims 8 and 9 above, and further in view of Kitamura et al. (PGPub 2003/0028994).

Oh, Ohno, Ataka and Tingle (as evidenced by Salo) teach all the essential elements of the claimed invention as stated above however fail to teach that the filter housing further comprises an opening cover for the selectively opening and closing the opening. Kitamura teaches a vacuum cleaner with a cover (38) for selectively opening and closing an opening (34). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the filter housing of Oh so that it comprises an opening cover as taught by Kitamura so that the opening can be selectively opened or closed depending on the use of the housing (paragraph 0030). When removing the housing from the filter mounting the opening cover should cover the opening to prevent dust from being released from the housing and when the housing is in position in the filter mounting the opening cover should be open to allow dust to pass through to the filter.

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Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oh (PGPub 2003/0167590) as applied to claim 14 above, in view of Boles et al. (USPN 6598263).

Oh teaches all the essential elements of the claimed invention however fails to teach that the filter assembly includes support projection and a locker capable of holding a tool for cleaning one side of the filter. Boles teaches a filter assembly comprising a cleaning tool (170) for cleaning one side of the filter. The cleaning tool can be installed in the filter assembly by means of tabs, adhesives or other means (col. 5, lines 30-40). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Oh's invention with the cleaning tool as taught by Boles so that the filter will be kept clean and in turn the filter will receive and capture more dust particles.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L. Karls whose telephone number is 571-272-1268. The examiner can normally be reached on 7:00-4:30 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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